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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,479	07/03/2003	Chun Yuen To	NTD 206-KFM	5917
10037	7590	08/09/2007	EXAMINER	
MILDE & HOFFBERG, LLP			GATES, ERIC ANDREW	
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SUITE 460				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/613,479

Applicant(s)

TO, CHUN YUEN

Examiner

Eric A. Gates

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 10-13, 23 and 24 is/are pending in the application:
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-13, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/8/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This office action is in response to Applicant's amendment filed on 21 May 2007.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-4, 6, 10-13, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kissel (U.S. Patent 4,690,580) in view of Ng (U.S. Patent 6,217,247).
4. Regarding claim 1, Kissel discloses a ring binder mechanism for binding the sheets of loose leaves, the mechanism comprising: an elongated spring plate 1 that extends longitudinally, and, in profile, has a shallow U-shaped configuration and opposite edges which extend substantially toward each other (see figure 6); two parallel elongate hinge plates 11/12 (parallel along their length) supported by said spring plate for pivotal toggle motion relative to the spring plate about a central hinge line (see column 2, lines 63-64), the hinge plates being mounted in parallel and retained by the opposite edges of the spring plate; a plurality of rings 2/3 for claspings said sheets of loose leaves, each of the rings comprising a pair 2 and 3 of half ring elements mounted on said hinge plates, with one half ring element of each pair being attached to one of the hinge plates and the other half ring element of the pair attached to the other hinge

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plate, with the two half ring elements of each pair in substantial alignment, the pairs of half ring elements being movable with said hinge plates to toggle between an open position and a closed position and forming a substantially annular shape when in the closed position (Webster's Online Dictionary definition of annular is "of or relating to a ring", elements 2 and 3 are identified as "ring portion", see column 2, line 17); wherein free ends 6/7 of the half ring elements of each pair form a nesting configuration when in the closed position, the free end of one half ring element of each pair having a centrally concave nesting portion 6 and the free end of the other half ring element of the pair having a centrally convex nesting portion 7, said concave portion 6 and said convex portion 7 being symmetrical about an axis line of the respective ring elements of the pair, so that when the pair of half ring elements are in the closed condition, the free ends of the half ring elements are aligned to each other and form a surface-engagement so that the convex nesting portion 7 and concave nesting portion 6 are nested together tightly, and wherein the nesting portion with a centrally convex portion 7 is formed in a free end 5 of one half ring element 3 of said pair of half ring elements 2/3, and the nesting portion with a centrally concave portion 6 is formed in a free end 4 of the other engaging half ring element 2, said convex nesting portion has an annular conical surface 10 which extends directly to a surface 5 of a cylindrical rod 3 forming the respective one half ring elements, said concave nesting portion has a conical hole 9 that is formed from its external end surface 4, a maximum diameter of the conical hole 9 on the external end surface 4 is smaller than that of a cylindrical rod 3 forming the respective other half ring element (in the horizontal plane, see figure 2), a cone angle of

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said conical hole 9 is about the same as that of the annular conical surface 10 of the centrally protruding outwards nesting portion.

Kissel does not disclose that a cone angle of said conical hole is smaller than that of the annular conical surface of the centrally protruding outwards nesting portion. However, Kissel discloses that these angles are about the same (see column 2, lines 41-51) for the purpose of having the conical hole 9 and the conical surface 10 in positive engagement in the closed position. Therefore it would have been obvious to have made the cone angle of the conical hole slightly smaller than the cone angle of the annular conical surface in order to make sure that the annular conical surface engages the conical hole in the closed position, as this combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

The modified invention of Kissel discloses that when the half ring elements are in the closed condition, a connecting portion (the corner edge between the end surface 4 and the conical hole 9) between the external end surface 4 of the concave nesting portion 6 and the conical hole 9 thereof engages with the annular conical surface 10 of the convex nesting portion 7, causing the convex nesting portion 7 to nest centrally in the concave nesting portion 6.

Kissel does not disclose said spring plate having at least one hole with a bushing therein for attachment of the ring binder mechanism to a file folder or control means for pivoting said hinge plates to move the pairs of ring elements between the open position and the closed position. Ng teaches the use of a ring binder mechanism 10 that has a spring plate 12 having two holes 54 with bushings 22 therein that are used for the

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purpose of attaching the ring binder mechanism 10 to a file folder 60, and control means 18 that are used for the purpose of pivoting hinge plates 14 to move pairs of ring elements 16 between an open position and a closed position. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the ring binder mechanism of Kissel with the bushings and control means of Ng in order to have a ring binder mechanism that uses bushings to protect the spring plate and a control means that makes it easier to open and close the ring elements.

5. Regarding claim 2, the modified invention of Kissel discloses wherein said concave nesting portion has a conical hole 9 that is formed in the free end of one half ring element, a diameter of the conical hole at its widest part being smaller than that of the respective half ring element (in the horizontal plane, see figure 2).

6. Regarding claim 3, the modified invention of Kissel discloses wherein the convex nesting portion 7 has a substantially conical protruding portion 8 with an outer diameter of a base of the protruding portion 8 being smaller than the diameter of the respective half ring element 3.

7. Regarding claim 4, the modified invention of Kissel discloses wherein the opening of said concave nesting portion 6 in the free end of one half ring element of each respective pair has a substantially conical hole 9 that is formed from its external end surface and an internal cylindrical hole 6 that is connected to said conical hole.

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8. Regarding claim 6, the modified invention of Kissel discloses wherein the protruding portion 7 of said convex nesting portion 7 has a cylindrical shape 7, and the opening of said concave nesting portion 6 has a shape of an internal cylindrical hole 6.

9. Regarding claim 10, the modified invention of Kissel discloses a ring binder mechanism according to claim 1, wherein two rings 2/3 are provided in said ring binder mechanism.

10. Regarding claim 11, the modified invention of Kissel discloses a ring binder mechanism according to claim 1, wherein said rings 2/3 are made of metal material (see page 1, line 24).

11. Regarding claim 12, the modified invention of Kissel discloses a ring binder mechanism according to claim 1, wherein said rings 2/3 are made of plastic material (see page 1, lines 35-38).

12. Regarding claim 13, the modified invention of Kissel discloses a ring binder mechanism according to claim 1, wherein said rings 2/3 are formed integrally with said hinge plates 11/12 (see Figure 6).

13. Regarding claim 23, the modified invention of Kissel discloses the invention substantially as claimed, except Kissel does not disclose wherein the pair of half ring elements of said ring binder mechanism form a circular ring. However, the Examiner takes Official Notice that it is well known in the art of ring binders to use a circular ring shape for the closed ring elements in order to allow the loose leaf paper to move more easily.

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14. Regarding claim 24, the modified invention of Kissel discloses wherein one half ring element of said pair of half ring elements of said ring binder mechanism has a straight side (see figure 1).

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kissel in view of Ng and further in view of To et al. (U.S. Patent Publication 2003/0044221 A1).

16. Regarding claim 5, the modified invention of Kissel discloses a ring binder mechanism according to claim 4, the opening of said concave nesting portion 6 has a conical hole 9 that is formed from its external end surface and an internal cylindrical hole 6 that is connected to said conical hole 9. Kissel does not disclose that the protruding portion of said convex nesting portion has a shape that "consists of" a cylindrical tip and an arc-shaped annular conical base portion.

To et al. teaches the use of a protruding portion 52 of a half ring element 48 that has a shape consisting of a cylindrical tip and an arc-shaped annular conical base portion (see Figure 2 and paragraph 26) for the purpose of providing suitable alignment and mating engagement with the corresponding recess on ring 50 (see page 2, paragraph 26 of To et al.). Therefore, and particularly absent any alleged criticality for the convex nesting portion having a shape that "consists of a cylindrical tip and an arc-shaped annular conical base portion" (noting for example at least figures 10, 11, 12, and 13 of the instant application), it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the binder mechanism of



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Kissel with the protruding portion of To et al. in order to have a binder with nesting portions that fit and align better.

***Response to Arguments***

17. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.
18. For the reasons as set forth above, the rejections are maintained.

***Conclusion***

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric A. Gates whose telephone number is 571-272-5498. The examiner can normally be reached on Monday-Thursday 7:45-6:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



EAG  
3 August 2007

  
MONICA CARTER  
SUPERVISORY PATENT EXAMINER